



# NHSN Prevention Process Measures in Outpatient Dialysis Facilities

## Hand Hygiene

May 2014

The findings and conclusions in this presentation are those of the authors and do not necessarily represent the official position of the Centers for Disease Control and Prevention



# Outline

- q **Introduction**
- q **Goals of participation**
- q **Data collection**
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  - § Process & tools
- q **Reporting**
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  - § How to report hand hygiene data
- q **How to calculate a hand hygiene adherence rate**

# Introduction

- q **Prevention Process Measures (PPM) is a new NHSN surveillance module for outpatient dialysis facilities**
  - § It presently includes one measure: hand hygiene adherence
  - § Additional PPMs will be added to NHSN in 2015
  
- q **Participation is optional**



# Goals of Hand Hygiene Adherence Surveillance

- q To calculate rates of hand hygiene adherence among all healthcare personnel in a facility
- q To provide feedback to healthcare personnel on hand hygiene adherence
- q To assess the impact of efforts to improve healthcare personnel's hand hygiene practice over time

# **DATA COLLECTION**

# NHSN Hand Hygiene Data Collection

## q Dialysis Prevention Process Measures Protocol

§ Required reading

§ Provides surveillance instructions and definitions

## q Data collection definitions:

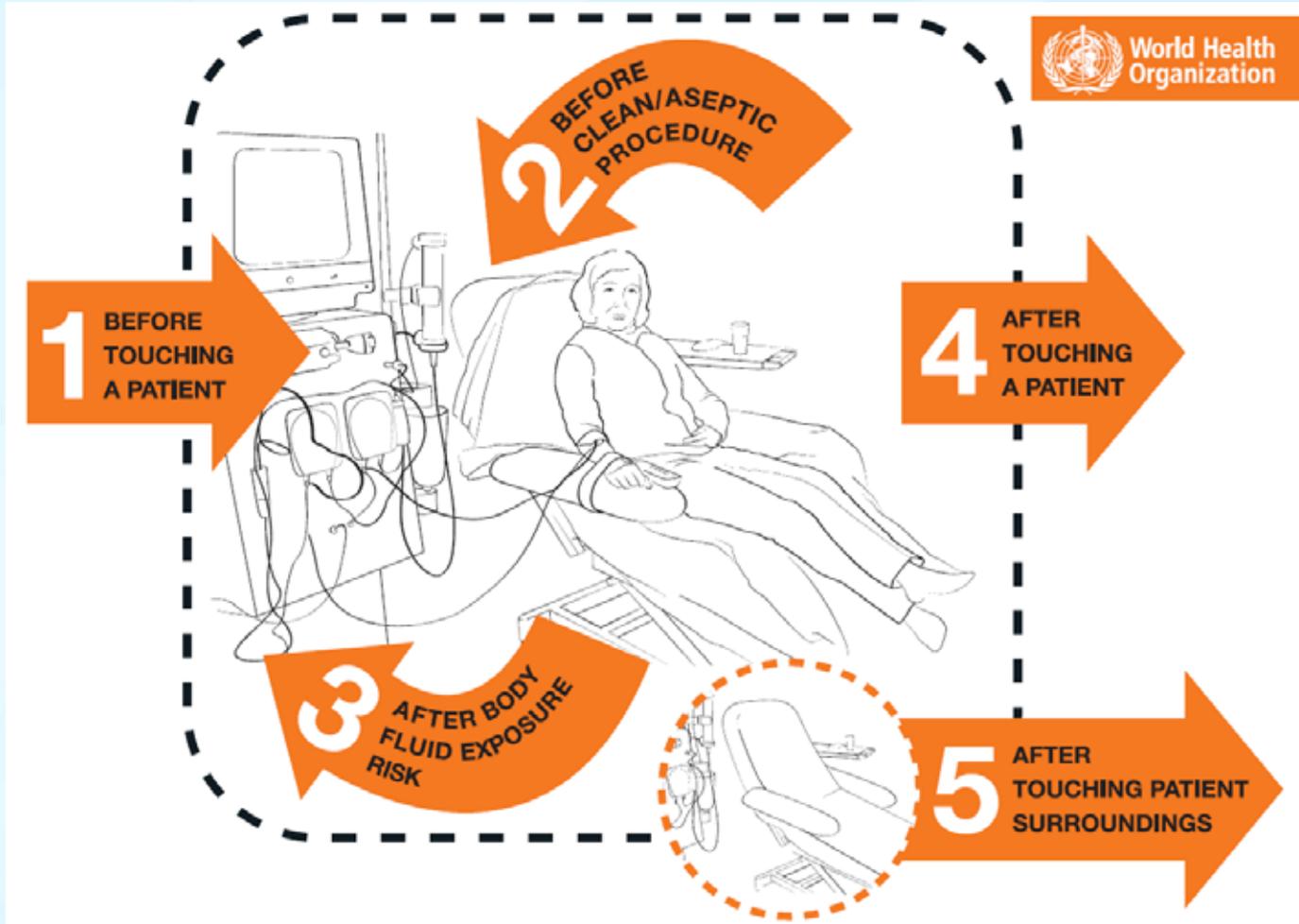
§ **Total # Successful Opportunities:** Total number of observed instances during which staff hand hygiene was warranted and was successfully performed.

§ **Total # Opportunities:** Total number of observed instances during which staff hand hygiene was warranted.

# Data Collection - Guide to Hand Hygiene Opportunities in Hemodialysis

Hand hygiene opportunity	Specific examples
1. Prior to touching a patient	<ul style="list-style-type: none"><li>• Prior to entering station to provide care to patient</li><li>• Prior to contact with vascular access site</li><li>• Prior to adjusting or removing cannulation needles</li></ul>
2. Prior to aseptic procedures	<ul style="list-style-type: none"><li>• Prior to cannulation or accessing catheter</li><li>• Prior to performing catheter site care</li><li>• Prior to parenteral medication preparation</li><li>• Prior to administering IV medications or infusions</li></ul>
3. After body fluid exposure risk	<ul style="list-style-type: none"><li>• After exposure to any blood or body fluids</li><li>• After contact with other contaminated fluids (e.g., spent dialysate)</li><li>• After handling used dialyzers, blood tubing, or prime buckets</li><li>• After performing wound care or dressing changes</li></ul>
4. After touching a patient	<ul style="list-style-type: none"><li>• When leaving station after performing patient care</li><li>• After removing gloves</li></ul>
5. After touching patient surroundings	<ul style="list-style-type: none"><li>• After touching dialysis machine</li><li>• After touching other items within dialysis station</li><li>• After using chairside computers for charting</li><li>• When leaving station</li><li>• After removing gloves</li></ul>

# Data Collection – World Health Organization 5 Moments for Hand Hygiene



## Data Collection Process

- q **Observations should be covert**
  - § To prevent data collection from influencing staff performance
  
- q **Try to ensure that observations are as representative as possible of normal practice at the facility:**
  - § Observe different staff members on different days and shifts.
  - § Consider observing during particularly busy times (e.g., shift change), when staff may be less attentive to proper practices.
  
- q **Focus on an area of the unit where staff interactions with patients are clearly visible**
  - § This may include observation of several staff members.
  - § In general, hand hygiene should be performed prior to and following direct contact with patients.

## Data Collection Tools

- q **Many hand hygiene observation tools exist**
  - § Any of these tools can be used to collect data for individual hand hygiene opportunities observed
  
- q **Try CDC's hemodialysis hand hygiene observations audit tool:**  
**<http://www.cdc.gov/dialysis/PDFs/collaborative/Hemo-dialysis-Hand-Hygiene-Observations.pdf>**



# **NHSN REPORTING**

## Monthly Reporting Plan

- q **A monthly reporting plan must be saved before data can be reported**
  - § Hand hygiene data can be reported either in-plan or off-plan
  
- q **To report hand hygiene data in-plan, “HH” must be checked on the Monthly Reporting Plan**
  - § This indicates data are collected and reported as specified by the **Dialysis Prevention Process Measures Protocol**
  - § In-plan reporting requires a minimum of 30 observations/month
  
- q **If a Monthly Reporting Plan has already been saved, it can be edited to add “HH”**

# How to Add a Monthly Reporting Plan

The screenshot shows the NHSN Reporting Plan interface. On the left is a navigation bar with the following items: NHSN Home, Alerts, Reporting Plan, Patient, Event, Procedure, Summary Data, Import/Export, Analysis, Surveys, Users, Facility, Group, and Log Out. The 'Reporting Plan' item is highlighted, and a yellow arrow labeled '1' points to the 'Add' link. The main content area is titled 'Add Monthly Reporting Plan'. It contains the following fields: 'Mandatory fields marked with \*', 'Facility ID\*: Dialysis Test Facility 4 (ID 10876)', 'Month\*: January', and 'Year\*: 2014'. A yellow arrow labeled '2' points to the 'Year\*' dropdown. Below these fields is a checkbox labeled 'No NHSN Patient Safety Modules Followed this'. Underneath is a section titled 'Device-Associated Module' with a 'HELP' icon. It contains a table with columns for 'Locations', 'CLABSI', 'DE', 'VAE', 'CAUTI', 'CLIP', 'PedVAP (<18 years)', and 'HH (dialysis only)'. The 'Locations' column has a dropdown menu with 'DIALYSIS - OUTPATIENT HEMODIALYSIS' selected. A yellow arrow labeled '3' points to this dropdown. Below the table are buttons for 'Add Row', 'Clear All Rows', and 'Copy from Previous Month'. At the bottom of the page are 'Save' and 'Back' buttons.

**1.** From the navigation bar, select “Reporting Plan,” then “Add”

**2.** Indicate the month and year data were collected

**3.** Select the outpatient dialysis clinic reporting location

# How to Add a Monthly Reporting Plan (con't)

**CDC** Department of Health and Human Services  
Centers for Disease Control and Prevention

NHSN - National Healthcare Safety Network

**Add Monthly Reporting Plan**

Mandatory fields marked with \*

Facility ID\*: Dialysis Test Facility 4 (ID 10876) ▾

Month\*: January ▾

Year\*: 2014 ▾

No NHSN Patient Safety Modules Followed this Month

**Device-Associated Module** [HELP](#)

Locations	CLABSI	DE	VAE	CAUTI	CLIP	PedVAP (<18 years)	HH (dialysis only)
DIALYSIS - OUTPATIENT HEMODIALYSIS ▾	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>				

When the dialysis location is selected, "DE" surveillance is checked automatically. "HH" surveillance needs to be selected manually.

4. Select the "HH" checkbox
5. Click "Save"

# How to Report PPM - Hand Hygiene Data

**CDC** Department of Health and Human Services  
Centers for Disease Control and Prevention

NHSN - National Healthcare Safety Network | NHSN Home | My Info | Contact us | Help | Log Out

Logged into Dialysis Test Facility 3 (ID 10856) as VET2.  
Facility Dialysis Test Facility 3 (ID 10856) is following the PS component.

## Add Patient Safety Summary Data

Summary Data Type: Prevention Process Measures - Hand Hygiene

- Device Associated - Intensive Care Unit / Other Locations
- Device Associated - Neonatal Intensive Care Unit
- Device Associated - SCA/ONC
- Device Associated - Outpatient Dialysis - Census Form
- Prevention Process Measures - Hand Hygiene**
- AUR - Antimicrobial Use and Resistance
- MDRO and CDI Prevention Process and Outcome Measures Monthly Monitoring
- Vaccination Monthly Monitoring Form - Summary Method
- Vaccination Monthly Monitoring Form - Patient-Level Method

Continue Back

1. From the navigation bar, select "Summary Data," then "Add"
2. Select "Prevention Process Measures" from the dropdown menu
3. Click "Continue"

# How to Report PPM - Hand Hygiene Data (con't)



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NHSN Home

Logged into Dialysis Test Facility 3 (ID 10856) as VET2.  
Facility Dialysis Test Facility 3 (ID 10856) is following the PS component.

- Alerts
- Reporting Plan
- Patient
- Event
- Procedure
- Summary Data
  - Add
  - Find
  - Incomplete
  - Delete AUR Data
- Import/Export
- Analysis
- Surveys
- Users
- Facility
- Group
- Log Out

## Prevention Process Measures Monthly Monitoring for Dialysis

Mandatory fields marked with \*

Facility ID\*: 10856 (Dialysis Test Facility 3)

Location Code\*:

Month\*:

Year\*:



### Prevention Process Measures

Hand Hygiene

Total # Successful Opportunities\*:

Total # Opportunities\*:



Comments

Custom Fields

Save  Back



4. Select the dialysis location, and month and year data were collected
5. Report the summary of all of the hand hygiene observations:
  - Total # of successful opportunities (*numerator*)
  - Total # of opportunities (*denominator*)
6. Click "Save"

# How to Calculate a Hand Hygiene Adherence Rate

$$\text{Hand Hygiene Adherence Rate} = \frac{\text{Total \# Successful Opportunities}}{\text{Total \# Opportunities}} \times 100$$

- q **To calculate a rate of hand hygiene adherence:**
  - § Divide the total number of successful opportunities by the total number of opportunities and multiply the result by 100
  - § NHSN reports for dialysis hand hygiene adherence will be available in August 2014
- q **Provide feedback to healthcare personnel on hand hygiene adherence**
- q **Assess the impact of efforts to improve healthcare personnel's hand hygiene practice over time**

# Questions?

Contact the NHSN Helpdesk  
[nhsn@cdc.gov](mailto:nhsn@cdc.gov)

**For more information please contact Centers for Disease Control and Prevention**

1600 Clifton Road NE, Atlanta, GA 30333  
Telephone, 1-800-CDC-INFO (232-4636)/TTY: 1-888-232-6348  
E-mail: [cdcinfo@cdc.gov](mailto:cdcinfo@cdc.gov) Web: [www.cdc.gov](http://www.cdc.gov)

